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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/489,929 | 01/24/2000 | Richard A. Lodge | 9-13528-77US | 6470 |

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EXAMINER

TRAN, PABLO N

ART UNIT PAPER NUMBER

2618

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 09/489,929 | Applicant(s) LODGE ET AL. | |
| | Examiner Pablo N. Tran | Art Unit 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-18, 21-29, 33-38, 41-47 and 49-52 is/are rejected.
- 7) ☒ Claim(s) 10-12, 19, 20, 30-32, 39, 40, 48, 53 and 54 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, 13-18, 21-29, 33-38, 41-47, and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi et al. (6,173,184) in view of Raith et al. (5,546,464).

As per claims 1, 21, and 41, Kikuchi et al. disclosed a wireless data communication network comprising a base station (fig. 2/no. 15), capable of bi-directional data communication with a wireless terminal (fig. 2/no. 1), wherein the base station having means for temporarily interrupting the bi-directional data transmission over the poorly performing wireless link (fig. 5, col. 7/ln. 39-42).

Kikuchi et al. suggest that the method of monitoring the wireless link performance is at the wireless terminal and not at the base station. However, Raith et al. teach such method of monitoring the wireless link performance at the base station (col. 3/ln. 15-18). Since, both references disclosed such method of monitoring and temporarily interruption of the wireless communication link, therefore, it would have been obvious to one of ordinary skill in the art to provide such teaching of Raith et al. to the communication

system of Kikuchi et al. in order to allow efficient handling of data transmission and effectively utilize system resources for a zone, cell, or a predetermined area within the network.

As per claims 2, 22, and 42, the modified system of Kikuchi et al. and Raith et al. further disclosed comparing each monitored performance parameter with a predetermined threshold (col. 3/ln. 20-22).

As per claims 3-4, 23-24, and 43-44, the modified system of Kikuchi et al. and Raith et al. further disclosed any one or more of a S/N ratio, a user data throughput rate, a C/I ratio, a BER ratio, suspend frames, or dropped frames (col. 3/ln. 15-18).

As per claims 5, 25, and 45, the modified system of Kikuchi et al. and Raith et al. do not explicitly disclosed an average, taken over a number of successive burst, of any one or more of the S/N ratio, the C/I ratio, the user data throughput rate, or the BER ratio. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such method of taking an average measurement of such performance parameter, well known, to the modified system of Kikuchi et al. and Raith et al. in order to provide an utmost accurate measurement prior to disconnected the poorly performance wireless link.

As per claims 6, 9, 26, 29, and 46-47, the modified system of Kikuchi et al. and Raith et al. disclosed such method of suspending the data transmission but not explicitly tracking the data transmission frames. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been

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obvious to one of ordinary skill in the art to provide such method of tracking the data transmission frames, well known, to the modified system of Kikuchi et al. and Raith et al. in order to provide a reliable communication system such that the amount of data transmission that is being suspended will be delivered to the receiving station.

As per claims 7, 27, the modified system of Kikuchi et al. and Raith et al. further disclosed resuming transmission after a delay period (col. 7/ln. 48-50).

As per claims 8, 15-16, 28, and 35-36, the modified system of Kikuchi et al. and Raith et al. do not disclosed re-transmitting of the data frame after a delay period of random length. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such method of re-transmitting the drop frame(s), well known, to the modified system of Kikuchi et al. and Raith et al. in order to provide a reliable communication system such that data transmission will be delivered to the user.

As per claims 13-14, 17-18, 33-34, 37-38, and 49-52, the modified system of Kikuchi et al. and Raith et al. do not disclosed dropping the communication links if a number of dropped frames exceed a threshold. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such method of drop the communication link(s), well known, to the modified system of Kikuchi et al. and Raith et al. in order to effectively utilize system resources.

Allowable Subject Matter

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3. Claims 10-12, 19-20, 30-32, 39-40, 48, and 53-54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-directauspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PABLO N. TRAN
PRIMARY EXAMINER



AJ2618

April 14, 2006